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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,780	02/25/2004	Scott Kendall	36320	3771

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EXAMINER

GRANT, ROBERT J

ART UNIT	PAPER NUMBER
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2838

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/786,780

Applicant(s)

KENDALL, SCOTT

Examiner

Robert Grant

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 25 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 6-8, 11-12, 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (US 6,625,963) in view of Morimoto et al. (US 6,491,121).

3. As to claim 1, Johnson discloses a circuit (Figure 10) comprising: a battery connection means (Element 96); a motor control means (element 104) for controlling an electric starting motor (element 98) that starts an engine; and a driven component capable of receiving electric powers from a battery connected to the battery connection means only when the motor control means is activated (Elements 104 and 98).

As to claim 2, which is dependent upon claim 1, Johnson further discloses the circuit comprising an alternator connection means wherein the driven component is capable of receiving electric power from either the battery or the rectified output of an alternator connected to the alternator connection means (Element 104 and 98).

As to claim 3, Johnson discloses a circuit (figure 10) comprising: a battery connection means (element 96); an alternator connection means (element 126); a motor control means (element 104) for controlling an electric starting motor (element 98) that starts the engine; a driven component capable of receiving electric power from either a battery connected to the battery connection means or the rectified output of an alternator connected to the alternator connection means (Element 98 and 104); second current blocking means for preventing current flow from the alternator to the motor control means and allowing current flow from the battery to the driven component only when the motor control means is activated (elements 98, 104, and 126). Johnson does not expressly disclose a first current blocking means for preventing current flow from the battery to driven component and allowing current flow from the alternator to the battery. Morimoto discloses a first current blocking means for preventing current flow from the battery to the driven component and allowing current flow from the alternator to the battery (Figure 2, element 28). It would have been obvious to a person having ordinary skill in the art at the time of this invention to combine the alternator and blocking means as taught by Morimoto with the circuit of Johnson, in order to allow charging of the battery.

As to Claim 6, Johnson discloses a circuit figure 10, comprising; a battery (Element 96); an alternator (element 126); an electric starting motor (element 98) for starting an engine; a motor control means for controlling the electric starting motor (element 104); a driven component capable of receiving electric power from either a

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battery connected to the battery connection means or the rectified output of an alternator connected to the alternator connection means (Element 98 and 104); second current blocking means for preventing current flow from the alternator to the motor control means and allowing current flow from the battery to the driven component only when the motor control means is activated (elements 98, 104, and 126). Johnson does not expressly disclose a first current blocking means for preventing current flow from the battery to driven component and allowing current flow from the alternator to the battery. Morimoto discloses a first current blocking means for preventing current flow from the battery to the driven component and allowing current flow from the alternator to the battery (Figure 2, element 28). It would have been obvious to a person having ordinary skill in the art at the time of this invention to combine the alternator and blocking means as taught by Morimoto with the circuit of Johnson, in order to allow charging of the battery.

As to Claim 7, which is dependent upon claim 6, Johnson further discloses wherein the motor control means further includes a solenoid (Figure 10, element 104).

As to Claim 8, which is dependent upon claim 7, Johnson discloses wherein the motor control means further includes a run or ignition switch (Figure 10, Element 100), a clutch or brake switch (element 102), and an attachment clutch switch (Element 112).

As to Claim 11, Johnson discloses a circuit Figure 10, comprising; a battery (element 96); an alternator (element 126); an electric starting motor for starting an

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engine (element 98); a motor control means for controlling the electric starting motor (element 104); a driven component capable of receiving electric power from either a battery connected to the battery connection means or the rectified output of an alternator connected to the alternator connection means (Element 98 and 104); second current blocking means for preventing current flow from the alternator to the motor control means and allowing current flow from the battery to the driven component only when the motor control means is activated (elements 98, 104, and 126). Johnson does not expressly disclose an internal regulator charger that receives an input voltage from the alternator and produces a stable DC output voltage or a first current blocking means for preventing current flow from the battery to driven component and allowing current flow from the alternator to the battery. Morimoto discloses an internal regulator charger that receives an input voltage from the alternator and produces a stable DC output voltage (column 4, lines 41-45 There must be some form of a regulator in order to keep the voltages around the proper level) and a first current blocking means for preventing current flow from the battery to the driven component and allowing current flow from the alternator to the battery (Figure 2, element 28). It would have been obvious to a person having ordinary skill in the art at the time of this invention to combine the alternator and blocking means as taught by Morimoto with the circuit of Johnson, in order to allow charging of the battery.

As to Claim 12, which is dependent upon claim 11, Johnson further discloses wherein the motor control means further includes a solenoid (figure 10, element 104).

As to Claim 14, which is dependent upon claim 12, Johnson further discloses wherein the motor control means further includes a run or ignition switch (figure 10, element 100) and a clutch or brake switch (element 102).

As to Claim 15, which is dependent upon claim 14, Johnson further discloses wherein the motor control means further includes a PTO disengaging switch (figure 10, element 106).

4. Claims 4-5, 9-10, 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Morimoto in further view of Burke (US 6,362,595).

As to Claims 4, 9, 16 and 18, which are dependent upon claims 3, 8, 14, and 15 respectively. Johnson in view of Morimoto do not expressly disclose using a diode as their first and second blocking means. Burke discloses using a diode as a current blocking means (Column 2, lines 54-57). It would have been obvious to a person having ordinary skill in the art at the time of this invention to use diodes as current blocking means in order to prevent the flow of current in the opposite direction.

As to Claims 5, 10, 17 and 19, which are dependent upon claims 3, 8, 14, and 15 respectively. Johnson in view of Morimoto do not expressly disclose a first current blocking means includes either a diode or a transistor and the second current blocking means includes either a diode or a transistor. Burke discloses using a diode as a current blocking means (Column 2, lines 54-57). It would have been obvious to a

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person having ordinary skill in the art at the time of this invention to use diodes as current blocking means in order to prevent the flow of current in the opposite direction.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Morimoto in further view of Swanson et al. (US 6,624,533).

As to claim 13, which is dependent upon claim 12, neither Johnson nor Morimoto disclose an external regulator charger. Swanson discloses an external regulator charger capable of receiving a 120 V, 60 Hz input voltage and producing a stable DC output voltage (Column 4, lines 64-67). It would have been obvious to a person having ordinary skill in the art at the time of this invention to combine the teachings of Swanson with the device of Johnson in view of Morimoto in order to allow the device to receive energy from a standard AC outlet when such power is available in order to run off of it, or to recharge the batteries.

6. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Morimoto in view of Burke and Swanson and Hwang Bo et al. (US 6,392,384).

As to Claim 20, which is dependent upon claim 15, Johnson in view of Morimoto disclose all the limitation of claim 15. Johnson in view of Morimoto do not expressly disclose wherein the first current blocking means includes a transistor, the second current blocking means includes a diode, and which further comprises an external regulator charger capable of receiving a 120 V, 60 Hz input voltage and producing a stable DC output voltage. Hwang Bo discloses using a transistor as a current blocking

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means (Column 1, lines 49-52). Burke discloses using a diode as a current blocking means (Column 2, lines 54-57). Swanson discloses an external regulator charger capable of receiving a 120 V, 60 Hz input voltage and producing a stable DC output voltage (Column 4, lines 64-67). It would have been obvious to a person having ordinary skill in the art at the time of this invention to combine the teachings of Hwang Bo and have the first current blocking means be a transistor so that current can be blocked from flowing from the battery to the driven components when desired, using Burke's teaching of having a diode as a second blocking means to prevent the flow of current from the alternator to the motor control, and use the teachings of Swanson in order to allow the device to receive energy from a standard AC outlet when such power is available in order to run off of it, or to recharge the batteries.

Response to Arguments

7. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

To further clarify the rejection, with regards to the amendment and the arguments, Johnson does in fact disclose a driven component (starting motor, element 98) which only receiver power from the battery when the motor control means is activated (Solenoid element 104). Therefore, the only time that the battery (96) supplies power to the driven component (98) is when the motor control means is activated (104).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Grant whose telephone number is 571-272-2727. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RG



Adolf Deneke Bernano
Primary Examiner